

STUDIO LIGHT

A MAGAZINE OF INFORMATION
FOR THE PROFESSION



PUBLISHED BY THE
EASTMAN KODAK COMPANY
ROCHESTER NEW YORK

JUNE 1921

SEED



PLATES

The measure of a plate's quality is not the length of the scale of tones it will reproduce, but the *correctness* with which it reproduces them.

Seed 30 Plates have a scale that permits of perfect reproduction of the longest range of tones that will be encountered in a photographic subject.

EASTMAN KODAK COMPANY,

ROCHESTER, N. Y.

All Dealers'.

*More than 80% of the X-Ray workers of
America use Eastman Tested Chemicals*

They must eliminate the element of
uncertainty from their work.

The surgeon's knife is guided by a
diagnosis of the X-Ray result.

Your results are not a matter of life
or death, but they are a matter of
dollars and cents.

Specify

EASTMAN
TESTED CHEMICALS

EASTMAN KODAK COMPANY,
ROCHESTER, N. Y.

All Dealers'.



PORTRAIT FILM NEGATIVE, ARTURA PRINT

*By Wilfred E. Smith
Chicago, Ill.*



STUDIO LIGHT

— INCORPORATING —

THE ARISTO EAGLE

THE ARTURA BULLETIN

ESTABLISHED 1901

ESTABLISHED 1906

VOL. 13

JUNE 1921

No. 4

THE BIG BUFFALO SHOW

There is no success so great but that it can be outdone. The Milwaukee Convention of the Photographers' Association of America was a big success. That the Buffalo Convention will be a bigger success is assured.

We have just had a pleasant interview with the President and the plans that he has unfolded leave no doubt in our minds as to the genuine worth of the Buffalo program to every photographer who attends.

Who in our profession has not wished he might some day see Pirie MacDonald in action, making one of his wonderfully virile portraits of a man.

Mr. MacDonald will do this and more. He will explain his methods, the light he uses, how he handles the sitter—and then he will get into action and make some of the inimitable MacDonald portraits.

That ought to be worth anyone's ten dollars. But in addition

there will be demonstrations by Eugene Hutchinson, Wm. H. Koehne, Walter Scott Shinn, Emma Hilton and others.

If you want to listen to constructive criticism you couldn't find a man in the country who knows more about photographs than Elias Goldensky. Possibly you saw him make his memorable demonstrations last year. Mr. Goldensky will spend an hour or two each day reviewing the picture exhibit. You can't afford to miss this.

Mr. Le Jaren A. Hiller of New York, the artist who does wonderful things with photography, will illustrate a story by Anna Katherine Green. This demonstration will interest everyone but will be of special value to those who wish to use photography for illustrative or advertising purposes.

Mr. Hiller uses the camera more than his brush and produces results that are really wonderful. His work is to be found in many of

the National magazines. This demonstration will be a headliner.

Mr. Henry Turner Bailey, the artist, will tell you what to put into the picture; Mr. Harry Collins Spillman will speak on practical psychology; Mr. Howard Webster will talk on commercial photography, Mr. Clarence Stearns on advertising and Mr. J. E. Mock's talk will be on subjects of general interest to photographers.

The entertainment features will be unusual in many ways and will do much towards making this a real, get-together convention. The Officers' Reception and Dance will be held at the Iroquois Hotel Monday evening. Tuesday noon there will be a big warming-up luncheon. It may cost you ten cents but it will be worth a dollar. Tuesday night, Grand Ball and Cotillion at the Music Hall.

Wednesday night the exhibit will be open to the public, at which time Mr. Wm. H. Towles will address the visitors. The entertainment will end Thursday evening with a trip to Niagara Falls. A free picnic lunch will be served in the park on Goat Island, after which the Falls will be electrically illuminated for the visitors.

This seems like enough to satisfy anyone and still we haven't mentioned the wonderful picture exhibit, the commercial features, the model studio, the trouble bureau or the manufacturers' exhibits.

The picture exhibit, surrounding a beautiful tea garden, will contain the cream of the work produced by American photographers as well as a foreign exhibit of unusual interest.

There will be a commercial demonstration each day in the model studio as well as other attractions prepared by the commercial section.

The model studio will have an elevated tier of bleachers that will seat 800 or more spectators. Aside from the portrait studio there will be completely equipped workrooms and a reception room with sales experts in constant attendance.

The trouble bureau will be a place where you can bring your troubles, and leave them. Experts will be in charge who will solve your problems. Mr. J. Garabrant will handle electrical problems, and there will be others who will be able to give lens and other valuable assistance.

We need not say much about the manufacturers' exhibits. All available space has been sold and everything new in apparatus and materials will be on display. It will be an exhibit such as is seen only at a national exhibition.

Make your plans for Buffalo the week of July 18. Ask your Ticket Agent for a Certificate for half-fare return trip if you travel by rail. Or if you motor to Buffalo, write the Secretary for free space in the Tent Garage adjoining the Convention Hall.



PORTRAIT FILM NEGATIVE, ARTURA PRINT

*By Wilfred E. Smith
Chicago, Ill.*



PUTTING CONTRAST IN THE COPY

In a letter signed "An Interested Reader" we have been asked to give some advice on the photographing of letters. The writer states that he finds shadows on the copy that he can not even detect in the negative.

Not having sent an example of his prints or negatives we can only treat the subject in a general way and try to cover any difficulties that might be experienced by other photographers in similar work.

In making a copy of a letter, a legal document or a similar subject, it must first be decided whether or not the texture of the paper on which the writing appears is to be reproduced. If this is desired, as is usually the case with important old documents, a fairly full exposure should be given on Commercial or Process Film. If Process Film is used the Elon Hydrochinon developer specially recommended for Process Film should be used. This will not give too great contrast and if the exposure has been sufficient a brilliant negative will be secured with normal development.

If it is desirable to show all possible detail in the print a soft paper should be used such as No. 1 or No. 2 Azo. If more contrast is desired No. 3 or No. 4 Azo may be used, the No. 4 giving the greatest amount of contrast in the print.

The fact that our questioner finds shadows on his copy of a letter leads us to believe that he has not secured the contrast and density in his negative that is necessary if he is to get black letters on a white background.

For such a treatment use a Process Film by all means. And to secure a great amount of density use the Hydrochinon-Caustic Soda developer which is recommended for extreme density. These formulas will be found in the "Eastman Professional Film" booklet.

The exposure should not be as full as for the negative in which detail is desired but development should be longer. Long development builds up contrast and density and this is what is required. Process Film may be developed to almost any degree of density and if not over-exposed there should be no trouble in securing a negative sufficiently opaque to give a black and white print with no intermediate tones.

If there has been over-exposure and the writing or printing is not sufficiently transparent the negative may be improved by a slight reduction with Farmers Reducer, the Red Prussiate of Potash and Hypo reducer which is published with almost all instructions for Plates and Films. This will quickly clear up the shadows without materially affecting the highlights, which in this case are represented by the entire background of the printed matter.



PORTRAIT FILM NEGATIVE, ARTURA PRINT

*By Wilfred E. Smith
Chicago, Ill.*



If the letter to be copied is typed or written with a blue ink it may be necessary to use a Process Panchromatic and a red or green filter to get a perfect result. But these plates are no more difficult to handle than ordinary plates if they are loaded into the holders in darkness and developed in darkness by time. They can not be handled by a red light because of their sensitiveness to red.

If ordinary means fail to give the necessary contrast and density or if the subject must be rendered in detail while the background or a piece of printed matter accompanying the subject must have contrast, Monkhoven's intensifier may be used for general or local intensification.

There is no more efficient intensifier known for producing strong contrasts but there is one objection to its use—it contains cyanide of potassium.

This chemical was commonly used in wet plate days but many a photographer's experience does not go back that far. So it is best to have a thorough knowledge of its poisonous nature before it is used.

One or two grains of this chemical are fatal and even the fumes or the dust of the dry chemical are extremely dangerous. The formula follows:

- A. Bromide of potassium . . 10 grs.
 Bichloride of Mercury . . 10 grs.
 Water 1 oz.

- B. Pure Cyanide of Potassium 10 grs.
 Nitrate of Silver 10 grs.
 Water 1 oz.

The silver and cyanide are dissolved separately and the silver added to the cyanide until a permanent precipitation is produced. The mixture is allowed to stand for fifteen minutes and after filtering, forms solution B.

Solution A is the bleacher. If a negative is to be locally intensified it should be fixed, washed thoroughly and the surface moisture removed. The part that is to be locally intensified may then be carefully painted over with the bleacher. Be careful not to allow the solution to run on to the parts that are not to be intensified.

After carefully bleaching the parts that are to be intensified the negative is washed and the entire surface flowed over with the B solution until the bleached image is thoroughly blackened. The negative is again washed, and the worker's hands should be thoroughly washed as well to remove any traces of cyanide.

It is advisable to make up only the amount of solution that is to be used and to pour the entire solution down the sink when the work is finished. This is a safety-first precaution.

We think this covers the ground in a fairly thorough manner. Our correspondent was not getting sufficient contrast and possibly not sufficient density. He may



PORTRAIT FILM NEGATIVE, ARTURA PRINT

*By Wilfred E. Smith
Chicago, Ill*



have been using a paper that was too soft.

Commercial or Process Films should be used more extensively for work that demands contrasty results. It is folly to even attempt to make one type of emulsion meet every requirement when special emulsions of Films and plates are made for special purposes.



A NEW ADAPTER BACK FOR STUDIO CAMERAS

To complete the adaptability of Studio Outfits to the use of double holders for Films or plates we have added a new Adapter Frame to the list of those already furnished for Studio Cameras.

The new Adapter Frame fits the Century Automatic Cabinet Attachment which is in use on many Studio Cameras. By removing the brass arm which engages the slide of the curtain holder the Adapter Frame takes the place of the curtain holder.

The reversible back of a 5 x 7 Eastman View Camera is then attached to the Adapter Frame and the studio camera is fitted to use the same double Film or plate holders that are used on the Eastman View Camera.

The advantages of such a back for your studio camera are that the holders are compact, each holder can be loaded with two Films or plates and such holders are not expensive.

THE PRICE

Adapter Frame for Century 5x7 Cabinet Attachment.....	\$4.00
Reversible Adapter Back for 5x7 Film or Plate Holders	10.00



THE MAN WHO MADE THE PICTURES.

The term "natural ability" as applied to photography covers considerably more than artistic talent and a technical knowledge of photographic processes. These alone may make a good photographer, but without a rather broad knowledge of human nature, a cheerful disposition, a pleasing personality and a large reserve of tact, it is hardly reasonable to say that a photographer is blessed with unusual natural ability.

Once in a while you do find a man who comes up to these specifications. The particular man we have in mind is Wilfred E. Smith, proprietor of the Lewis-Smith Studios, Chicago.

If you have ever seen him photograph children you can readily understand why his little clients refuse to be dignified in his presence. Their parents may "Mr. Smith" him as much as they please but to the youngsters he is "Billy".

And possibly this may, in a measure, explain his success with grown-ups. After all, we are only children, grown up and become



PORTRAIT FILM NEGATIVE, ARTURA PRINT

*By Wilfred E. Smith
Chicago, Ill.*



more conscious of ourselves and our responsibilities. We take life very seriously, which is all the more reason for our appreciating the geniality or personal magnetism, or whatever we may choose to call that rare faculty some men have of making us cast off our shell of formality and becoming our natural selves.

Mr. Smith has this rare faculty. But it is well balanced with tact, good business sense and complete confidence in his ability.

He is a very versatile workman, possibly because his experience has been unusually broad. As a home portrait photographer his work has been varied, extensive and always successful.

He was one of the first photographers to take up the use of Film exclusively and there are few conditions of light which he has not encountered and mastered with the aid of Portrait Film.

It is little wonder then that when the new Lewis-Smith Studios were opened in, or rather on top of the Blackstone Hotel, that Film should have been the negative making material selected for this studio's work.

Loyalty is one of Mr. Smith's most admirable characteristics and Film is one of his best friends. He is too modest to say anything about himself, but when asked what factors had contributed to his success, replied: "I am a firm believer in service and quality. By service I mean prompt delivery of

work when promised, and quality to me means Films and Artura paper.

Mr. Lewis has severed his connection with the Lewis-Smith Studios so Mr. Smith is now going it alone. We count ourselves among his many friends who wish him continued success.

Our illustrations are examples of Mr. Smith's work in the Chicago studio.



TWO NEW PAPERS

Because of the increased use of gloss and semi-gloss, white stock papers for contact prints we have anticipated a similar demand for Bromide papers and have added two new papers to the P. M. C. line. These new papers will be known as P. M. C. No. 9 and P. M. C. No. 9 Contrast.

The surface of these papers is a semi-gloss while the stock is pure white, double weight. The P. M. C. No. 9 is coated with the regular emulsion while the No. 9 Contrast will produce exceptionally brilliant prints from negatives that are too flat for the regular emulsion.

These two new papers will be welcomed by the commercial photographer and the amateur finisher as they are specially suited to a class of enlarging work encountered in both of these branches of photography.



PORTRAIT FILM NEGATIVE, ARTURA PRINT

*By Wilfred E. Smith
Chicago, Ill.*





EASTMAN PORTRAIT FILM WASHING TANK

This very convenient washing tank has been designed specially for the washing of Film negatives in Film Developing Hangers. As will be seen by our illustration, the tank will accommodate both 5 x 7 and 8 x 10 negatives. In washing 5 x 7 negatives one end of the hanger rests on the end of the tank and the other on the sliding brace placed across the center of the tank. The brace serves two purposes. It prevents the tank from bulging when full of water and supports the ends of the hangers when placed crosswise of the tank.

Both 5 x 7 and 8 x 10 Films can be washed in the tank at the same time or the entire tank can be used for one size. The capacity when No. 2 Film Hangers are used is twelve 5 x 7 and nine 8 x 10 negatives, or when one size of

negatives is being washed, twenty-four 5 x 7 or eighteen 8 x 10 negatives.

The tank is of a very convenient size and may be used in almost any sink. The inside dimensions are $10\frac{3}{4}$ x $16\frac{1}{2}$ inches. The water is fed into the bottom of the tank through a rubber tube which connects with the perforated metal feed pipe that makes a complete circuit of the tank.

The water is very evenly distributed, but to insure perfect distribution and to prevent the force of the water from moving the films about, a removable, perforated, false bottom covers the intake pipe and insures an even upward flow of fresh water at all times.

Another feature of the tank which helps to insure the rapid elimination of the chemicals that



PORTRAIT FILM NEGATIVE, ARTURA PRINT

*By Wilfred E. Smith
Chicago, Ill.*



are washed out of the films is the overflow on either side. There are fourteen outlets, seven on each side. The water flows upwards and out. Because the water rises evenly from the entire bottom area of the tank and has this ample outlet, there are no back currents and negatives are thoroughly washed in the shortest possible time.

The tank is very light in weight and this, with its convenient size and the efficient manner in which it washes negatives, makes it a very desirable addition to the Film worker's dark room.

The price of the Eastman Portrait Film Washing Tank is \$8.50.



A NEW TYPE OF FILM DEVELOPING HANGER

The No. 4 Eastman Film Developing Hanger is of an entirely new type, following very closely the general lines of the Core Plate Developing Rack. There are no clips to hold the Film in place as clips are unnecessary with this new hanger. The Film slides easily into the side and end channels. The top channel is hinged. When the Film is in position the top channel is closed and a spring holds it in place.

The bottom and two side channels are perforated on their edges and one side so that the developer drains away from the Film as soon as it is removed from the solution.

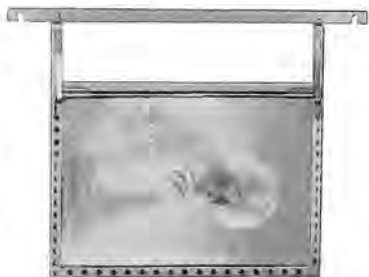


Front of Hanger

As the Film is held on its four sides and there is room enough for the slight expansion that occurs when the Film is wet, there is no bulging whatever and the hangers can be placed as closely together in a tank as glass plates.

The cross bars of the No. 4 Hangers are approximately the same length as other film hangers, are made of a flat strip of metal and have deep notches near either end which permit of their being hung on a wire while the negatives are drying.

The parts of the hanger that go into the developer are made of a non-corrosive, rust-proof metal.



Back of Hanger



PORTRAIT FILM NEGATIVE, ARTURA PRINT

*By Wilfred E. Smith
Chicago, Ill.*



It is strong and durable and very convenient for holding the Film while it is developed, fixed, washed and dried.

The No. 4 Eastman Film Developing Hangers are made in three sizes. The 5 x 7 Hangers are 60 cents each; the 6½ x 8½ and 8 x 10 are 75 cents each, at your dealers'.



THE WOMAN'S AUXILIARY

Esteemed Friend:

This year the Woman's Auxiliary of the P. A. of A. is planning great things. We have been organized for only two years, so have not had much opportunity to be useful to the Board. But this year we are to help entertain the ladies attending the National Convention, so that no man can go away and say truthfully that "taking the wife to the Convention was an interference"; or, "if I had not had the Mrs. to look out for, I could have seen how to develop that new paper all the boys are using." No, indeed! This year friend wife is to be very busy, as she is to meet the dealers' and manufacturers' wives, and the wives of all the photographers, and all the ladies attending the Convention; in fact, she is to act as hostess, as the Auxiliary is to have headquarters right inside the Hall—a nice place to rest and visit. Each day, ladies from differ-

ent sections are to act as hostesses. Don't you like the idea?

Then, we are to have a lovely "tea garden"—where tea is to be served every afternoon, free. The ladies are also to have charge of this—and act as hostesses, so you see we need you.

It is a little early to plan your vacation, but I know you have been thinking about it; but wherever you have planned to go this year, do go by way of Buffalo and make it in time for the National Convention, July 18th to 23rd.

We will have Reduced Railroad Fares to Buffalo. Buy a one-way ticket and ask the ticket agent for a certificate for the P. A. of A.; then when you return home, the certificate is honored by the railroads and you pay only half fare. It is important that you ask for the certificate.

The Board this year has promised the members the best Convention ever held, and from plans already far advanced, I know it will be. There are so many new things a man cannot afford to miss. Just one of the many things they are to see this year is a simple process to save the silver from discarded developer. Do you know that each year your expenses to the Convention could be saved from what is dumped down the sink?

Have a talk with friend husband today, and tell him what I have told you; get him interested enough to send in his membership



PORTRAIT FILM NEGATIVE, ARTURA PRINT

*By Wilfred E. Smith
Chicago, Ill.*



dues, if he has not already done so.

If this part is settled, please drop me a card, telling me you will be in Buffalo, so that I may place you on a committee where you can help us put the Woman's Auxiliary on record this year as a big success of the National Convention.

Thank you for giving me so much of your valuable time, and I do hope we shall meet this year in Buffalo.

Cordially yours,
BERTHA E. TOWLES
Chairman.

1520 Connecticut Ave.
Washington, D. C.



D RYING GLOSSY PRINTS WITH HEAT

Occasionally we are asked why glossy papers are not made sufficiently hard, physically, to permit of their being dried quickly, by heat, in some of the forms of belt dryers.

The answer is a very simple one. Glossy papers are made specially for ferrotyping. The commercial photographer prefers the high gloss that is secured by this process of drying. And in order to secure a perfect gloss the gelatine must be soft enough to adhere perfectly to the ferrotype plate and take on its glossy surface.

If a glossy paper is made hard enough to go through a belt dryer without sticking, it is too hard for perfect ferrotyping, and if soft

enough for ferrotyping, it is too soft for belt drying.

Belt drying does not add any to the gloss of a print, in fact it deadens it slightly. So we think that in many cases semi-gloss papers, which *are* sufficiently hard for belt drying, can be satisfactorily used for work which must be dried quickly.

If, however, it is absolutely necessary to use glossy papers and to dry prints by heat, a bath of formalin will sufficiently harden the prints provided the heat for drying is not excessive.

In using a formalin bath the length of time required to harden the prints is in direct proportion to the strength of the solution. A 40% formalin solution will sufficiently harden prints in 4 minutes. Dilute this solution with an equal volume of water and 8 minutes will be required. Diluted 1 to 3 will require 15 minutes and 1 to 7, 30 minutes.

Prints should be washed thoroughly before they are placed in the formalin solution and rinsed again in clear water after they have been hardened and before they go into the dryer. Prints are always of better quality when dried slowly.



Use

ELON



PORTRAIT FILM NEGATIVE, ARTURA PRINT

*By Wilfred E. Smith
Chicago, Ill.*



WHEN THE TEMPERATURE GOES UP

There was a time when the mere mention of hot weather suggested all sorts of photographic difficulties. It is probably too Utopian to prophesy that a time will come when all hot weather troubles will be at an end but we do think that constant reminders of the necessary precautions to take have had the effect of greatly minimizing these troubles.

When we consider the nature of photographic materials, gelatine for example, and the treatment it receives, it is little wonder that some trouble is occasionally encountered.

Gelatine will stand a great deal of abuse before it will rebel at its treatment and make trouble. It will swell and shrink, theoretically, without changing its shape, the only difference being in its bulk. But this is only possible when it swells slowly and dries slowly and evenly.

This is not possible with a gelatine emulsion because one side of the gelatine is firmly attached to the film or glass support. We might say, however, that the gelatine on a film or plate with normal treatment does not swell beyond the bounds of safety in solutions up to a temperature of 68°F.

Beyond that point some means must be used to prevent excessive swelling. It is its nature to swell sidewise as well as up but as it is

firmly attached to its support it can not swell sidewise without loosening itself from its support. When it does this we say it frills.

If it swells sidewise and becomes much larger in area than its support, but is still held fast in spots, there is but one thing it can do. It must wrinkle up just as a 10x12 piece of paper would if you attempted to mount it on an 8 x 10 support without having any of the edges extend beyond the mount. This wrinkling of the gelatine film, which is the result of excessive lateral swelling, is called reticulation.

There are no cures for these troubles but there are means for their prevention. One of the principal precautions is the use of the formulas recommended by the manufacturer, good chemicals of certain strength, the proper care of these chemicals to prevent deterioration and the use of fresh solutions, properly compounded.

In addition to temperature, acid and alkali have a great influence on the swelling and softening of gelatine. Trouble occurs most often in the fixing bath when the action of the hardening agent (alum) is offset by alkali carried over from the developer or an excess of acid. Fixing baths can not be renewed by the addition of acid and hypo. The only safe method is to discard the old bath and prepare a new one.

The life of the fixing bath can be somewhat prolonged by keep-



PORTRAIT FILM NEGATIVE, ARTURA PRINT

*By Wilfred E. Smith
Chicago, Ill.*



ing it free from alkali. This is done by placing negatives in a rinse bath between developing and fixing. The bath is made as follows:

Water	1 gal.
Chrome Alum.....	6 ozs.
Sulphuric Acid	2 drs.

Rinse the Films or plates for two or three minutes in this solution after developing and before fixing. The acid will neutralize the alkaline developer that is in the film, while the alum will harden the gelatine.

Keeping the developer, the rinsing solution and the hypo at fairly uniform temperatures also helps to prevent gelatine troubles. Considering the great change in the swelling of a gelatine film in passing from an alkaline developer to an acid hypo solution it is readily seen that a great difference in temperature of solutions would set up an unnecessary strain upon the gelatine.

In fact reticulation is caused by uneven hardening of the gelatine due to the presence of acid or alkali in connection with heat. The gelatine tries to do two things at once, shrink and swell. And when it does both, reticulation is the result.

The greatest hot weather precaution is the use of a fresh fixing bath. To simplify the making of the acid-hypo prepare the following stock solution of hardener:

Water	80 ozs.
E. K. Co. Sulphite of Soda	8 ozs.
No. 8 Commercial Acetic Acid.....	48 ozs.
Powdered Alum	8 ozs.

A fresh fixing bath may be quickly made by dissolving two pounds of hypo in a gallon of water and adding five ounces of this stock solution of hardener.

With the precautions we have mentioned, closely observed, there should be very few hot weather difficulties.



DELAYED PUBLICATION

The publication of Studio Light has been delayed because of a printers' strike. We regret that the magazine has been thrown off its schedule but the delays have been unavoidable.

The live quality of a picture, so easily destroyed by halation, is preserved in the negative made on

**EASTMAN
PORTRAIT FILM**



PORTRAIT FILM NEGATIVE, ARTURA PRINT

*By Wilfred E. Smith
Chicago, Ill.*





To keep the memory of school days
—your portrait for
your classmates.

*Make the appointment
today*

THE
SMITH
STUDIO

Line cut No. 287. Price, 30 cents.

THE ONLY CONDITION

We make but one condition in our offer of cuts for the use of photographers.

It is obvious that two photographers in the same town would not care to use the same cut, and we are therefore obliged to limit this offer to one photographer in a town. It will be a case of first come first

served. The first order from a city will be promptly filled. Succeeding orders (if any) will necessarily be turned down and the remittance, of course, will be returned. It is also obvious that we cannot, on account of the cost of the drawings, furnish any large variety of cuts at the nominal prices quoted, and therefore can offer no substitute cut. Get your order in *early*. E. K. CO.

One Commercial Photographer's Opinion

"We are using Commercial Ortho Films exclusively in Commercial work and they are giving us splendid results. Freedom from halation was to be expected but the Film is better in every way than the plates we were using. To our surprise we were able to make instantaneous exposures as late as seven p. m. in summer while their greater latitude permits of the long exposures for detail in deep shadows."

*Asahel Curtis, Commercial Photographer
of Seattle, Wash.*

There's a Film for practically every commercial need — Eastman Portrait, Commercial Ortho, Commercial and Process.

EASTMAN KODAK COMPANY

ROCHESTER, N. Y.

All Dealers'.

The proportions of a picture have much to do with its attractiveness.

The long narrow rectangle is specially pleasing for pictures of houses and grounds, gardens, landscapes, groups and many architectural subjects.

Seven by eleven is an example. It's a size that is fast becoming popular. It looks larger than 8 x 10 yet the materials cost no more.

See the Eastman View Camera No. 2, 7 x 11, before you buy a new outfit.

EASTMAN KODAK COMPANY
ROCHESTER, N. Y.

All Dealers'.

To safeguard the quality of
your results on photographic
papers, use

ELON

We make it — we know it's right

EASTMAN KODAK COMPANY
ROCHESTER, N. Y.

All Dealers'.

All the advantages of Bromide speed and latitude — all the quality of contact prints, when you make portrait enlargements on

EASTMAN PORTRAIT BROMIDE

Rough Matte and Rough Lustre in two stocks — D White and E Buff. The price is the same as for double weight Artura Iris.

EASTMAN KODAK COMPANY
ROCHESTER, N. Y.

All Dealers'.



The No. 9 Century Studio Outfit

The use of long focus lenses is rapidly increasing because they give better perspective and drawing. In the making of large heads a long bellows extension is necessary with these lenses.

The No. 9 Century Studio Outfit with its extra long bellows extension provides a focal capacity of 36 inches, sufficient for practically any long focus portrait lens.

The adjustments of this Outfit are so smooth and direct in action that the photographer's attention can be concentrated on the delineation of his subject.

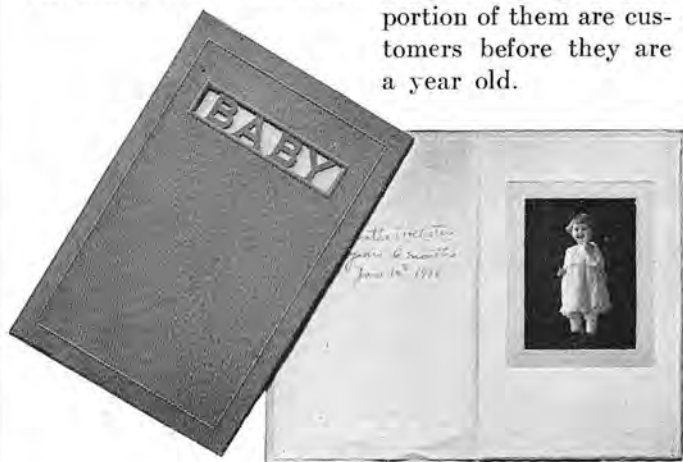
See it at your Stock House

Eastman Kodak Company,

Century Camera Department

ROCHESTER, N. Y.

Millions of Babies are born every year and a great proportion of them are customers before they are a year old.



THE BABY DAY FOLDER

Is still the best style in the 3 x 4 and 4 x 6 sizes,
for this class of work

Prices — \$7.50 and \$8.50 per hundred
Colors — Grey and Brown

Our Special Tip — Always show the BABY DAY folder and the Baby Picture Album (De Lux Series) to prospective buyers of baby pictures — The folder for the portraits they give away — The Album for their own home — 'Tis a business producer.

Samples of the Baby Day folder for five 2c. stamps.
Of the Baby Picture Album — \$2.25 each, postpaid

TAPRELL, LOOMIS & COMPANY

(EASTMAN KODAK COMPANY)

CHICAGO, ILLINOIS

The Leading Card Novelty House of America

The customer appreciates
quality—make the print
on

ARTURA

*The paper without a
disappointment*

EASTMAN KODAK COMPANY

ROCHESTER, N. Y.,

All Dealers'.

The sound reason for Film
success is the fact that with
Film the photographer can
make better negatives. Use

EASTMAN PORTRAIT FILM

EASTMAN KODAK COMPANY

ROCHESTER, N. Y.

All Dealers'.